

Minnesota Journal of Law, Science & Technology

Volume 11 | Issue 2

Article 15

2010

DWI Source Code Motions after Underdahl

David Liebow

Follow this and additional works at: <https://scholarship.law.umn.edu/mjlst>

Recommended Citation

David Liebow, *DWI Source Code Motions after Underdahl*, 11 MINN. J.L. SCI. & TECH. 853 (2010).
Available at: <https://scholarship.law.umn.edu/mjlst/vol11/iss2/15>

The Minnesota Journal of Law, Science & Technology is published by the
University of Minnesota Libraries Publishing.



Note

DWI Source Code Motions after *Underdahl*

*David Liebow**

I. INTRODUCTION

Drunk driving is a tremendous problem facing the United States, and prosecution of driving while intoxicated (DWI) offenses is an important step toward preventing such behavior. Perhaps the most important tool law enforcement possesses for obtaining DWI convictions is the use of “breathalyzers,” machines which purport to reveal the amount of alcohol in a tested person’s blood. Recently, DWI defendants have had some success in attempting to obtain the source code of such machines in order to attack the accuracy of the results. Such success, however, has been limited, with courts granting less-than-full access and machine manufacturers fighting such efforts using trade secret and copyright laws.

This Note investigates the issue of breathalyzer source code access, summarizing recent developments in source code access case law and identifying remaining legal questions to be resolved, and argues that the problem has yet to be satisfactorily resolved. Part II describes the current state of DWI law, the use of breathalyzers, and the history of the law relating to source code access. Part III argues for the need for source code access, analyzes the current law’s fairness to prosecutors, defendants, and machine manufacturers, and proposes a solution. This Note concludes that the current, limited access that courts have granted DWI defendants to breathalyzer source code is insufficient to protect the right to contest evidence and that manufacturers’ interests in protecting their intellectual property must be secondary to the

© 2010 David Liebow.

* J.D. Candidate 2011, University of Minnesota Law School; B.A. 2008, University of Minnesota. The author would like to thank his parents, siblings, friends, and the MJLST staff and board.

defendants' liberty interest.

II. THE HISTORY OF DRUNK DRIVING LAWS, BREATHALYZERS, AND SOURCE CODE ACCESS

A. AN OLD ADVERSARY: OUR LONG BATTLE AGAINST DRUNK DRIVING

Drunk driving is a tremendous problem facing the United States. Over 13,000 people were killed in "alcohol-impaired-driving" incidents in 2006, accounting for 32 percent of total traffic fatalities in the United States, in addition to an untold number other of accidents and injuries.¹ In 2007, an estimated 1,427,000 arrests were made for driving while intoxicated.² The cost to the U.S. public for alcohol-related vehicle accidents was \$114.3 billion in 2000, and about 63 percent of these costs were borne by someone other than the drinking driver.³ These statistics likely represent only a sliver of the true impact drunk driving has on society; the true financial and human costs are enormous.⁴

Since the beginning of the automotive era, American policy has favored the criminal process to address drunk driving.⁵ New York and California had impaired driving laws on the books before World War I and by the mid-1920s, Connecticut was incarcerating hundreds of drivers each year for such offenses.⁶ Early laws were difficult to apply, particularly because they were adopted before the advent of reliable tests

1. NHTSA'S NAT'L CTR. FOR STATISTICS AND ANALYSIS, U.S. DEP'T OF TRANSP., TRAFFIC SAFETY FACTS: ALCOHOL-IMPAIRED DRIVING (2008) 1, available at <http://www-nrd.nhtsa.dot.gov/Pubs/810801.PDF>.

2. Federal Bureau of Investigation, U.S. Dep't of Justice, 2007 Crime in the United States: Table 29 (2008), http://www.fbi.gov/ucr/cius2007/data/table_29.html (last visited March 1, 2010).

3. NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., IMPAIRED DRIVING IN THE UNITED STATES, http://www.nhtsa.dot.gov/people/injury/alcohol/impaired_driving_pg2/US.htm (last visited March 1, 2010).

4. Most statistics account only for alcohol-related accidents, but the total costs of drunk driving also include those of the judicial process, incarceration of those charged and convicted of DUI, loss of jobs or wages related to loss of driving privileges, etc.

5. H. LAURENCE ROSS, CONFRONTING DRUNK DRIVING: SOCIAL POLICY FOR SAVING LIVES 42 (1992).

6. *Id.*

for alcohol in the body.⁷ These early laws also followed a different form than is often seen today, typically creating a presumption of impairment for a blood alcohol content (BAC) above .15 percent, a presumption against impairment for BAC under .05 percent, and the possibility of impairment between these two percentages given corroborating evidence.⁸ Today, many states have both a *prima facie* statute and a *per se* statute.⁹ A *prima facie* statute allows a BAC reading to constitute *prima facie* evidence of impairment, allowing a jury to presume intoxication.¹⁰ A *per se* statute, meanwhile, criminalizes the operation of a vehicle while having higher than a particular BAC, today 0.08 percent in every state.¹¹ Due to federal mandate, this 0.08 percent level is down from the 0.10 percent level often seen in the past.¹² According to Professor E. John Wherry, “[a] *per se* violation is a strict liability or status offense for which few, if any, defenses are available.”¹³ A reliable and accurate tool for measuring BAC, then, is helpful for enforcing *prima facie* statutes and necessary for *per se* statutes.

B. OUR MOST USEFUL TOOL: THE USE OF BREATH TESTING EQUIPMENT IN THE DWI FIGHT

Several companies manufacture machines, popularly referred to as “breathalyzers,” which purport to measure BAC through the use of breath testing.¹⁴ Among the most popular of

7. *See id.* at 41–42.

8. *Id.* at 42–43.

9. *See* David Polin, Annotation, *Challenges to Use of Breath Tests for Drunk Drivers Based on Claim that Partition or Conversion Ratio Between Measured Breath Alcohol and Actual Blood Alcohol Is Inaccurate*, 90 A.L.R.4th 155, 161 (2009).

10. *Id.*

11. *See id.* at 164. Minnesota law, for example, contains both types in the same statute. MINN. STAT. § 169A.20.1(1) (Supp. 2009) (“It is a crime for any person to drive . . . any motor vehicle . . . when: the person is under the influence of alcohol”); MINN. STAT. § 169A.20.1(5) (Supp. 2009) (“It is a crime for any person to drive . . . any motor vehicle . . . when: the person’s alcohol concentration . . . as measured within two hours of the time, of driving . . . the motor vehicle is 0.08 or more . . .”).

12. *See* 23 U.S.C. § 163 (2006).

13. E. John Wherry, Jr., *The Rush to Convict DWI Offenders: The Unintended Unconstitutional Consequences*, 19 U. DAYTON L. REV. 429, 437 (1994).

14. *See, e.g.,* Thomas E. Workman Jr., *Massachusetts Breath Testing for*

these machines is the Intoxilyzer 5000 machine, manufactured by CMI, Inc.¹⁵ As described by David Polin:

[T]hese devices all operate on the basis of a principle called Henry's Law, which states that the concentration of a volatile substance dissolved in a liquid is directly proportional to the vapor pressure of the volatile substance above the liquid. As one court put the matter, in terms of applicability of Henry's Law to breath testing, "The trick is how to formulate the proper ratio of alcohol found in the breath to the alcohol found in the blood." Breath testers apply Henry's Law to the question of whether a driver is intoxicated by measuring the amount of alcohol in a known amount of deep-lung (alveolar) breath, and calculating from that figure the amount of alcohol in the subject's blood. As blood flows through the deep lungs, the very function of which is to exchange gases between the blood and the atmosphere, alcohol in the blood will escape into the exhaled breath, where it may be measured by a breath tester. Theoretically, Henry's Law allows one to calculate the concentration of alcohol in the blood from the amount that escapes into the breath. To precisely apply it, however, in the manner of a physicist in the laboratory, one would have to control the variable factors, such as temperature and atmospheric pressure, or account for them in the calculations. In practice, in every American jurisdiction where breath testing is employed, blood-alcohol concentration is calculated by multiplying the percentage of alcohol in the breath by 2100.¹⁶

Not every person has this "partition ratio" of 2100:1, however.¹⁷ Ratios vary among individuals, and experts commonly cite ranges from 1100:1 to 3400:1.¹⁸ A mistaken partition ratio will cause significantly erroneous results—people with a lower ratio may have their BAC overestimated and those with a higher ratio may have their BAC underestimated.¹⁹ Research has shown that many other factors can influence the results of a breathalyzer, as well. A person's gender and race are among the intrinsic factors that can impact his partition ratio.²⁰ Research has shown that several external

Alcohol: A Computer Science Perspective, 8 J. HIGH TECH L. 209, 211 (2008). "Breathalyzer" is the name of a particular, trademarked machine, but it is used popularly to describe the machines as a group and will be similarly used here.

15. CMI, Inc., Intoxilyzer 5000EN, <http://www.alcoholtest.com/intox5000.htm> (last visited May 2, 2010).

16. Polin, *supra* note 9, at 160.

17. Paul Schop, *Is DWI DOA?: Admissibility of Breath Testing Evidence in the Wake of Recent Challenges to Breath Testing Devices*, 20 SW. U. L. REV. 247, 257 (1991).

18. *Id.* at 258.

19. *Id.* at 257.

20. *Id.* at 261–62.

factors can affect a breathalyzer test result, as well. These include the presence of unmetabolized alcohol in the mouth,²¹ variations in body temperature,²² diabetes, consumption of paint thinners, and adherence to the Atkins Diet²³ are just some of the reasons for a possibly false positive result. Moreover, in at least one state, the prosecution need not prove breathalyzer results within a margin of error.²⁴ Given that extremely high stakes can be involved, with some states having felony-level DWI sentences,²⁵ the potential for serious error is troubling.

Many DWI defendants have found themselves with few defenses. Some have attacked the 2100:1 partition ratio assumed by breathalyzers either as a general matter²⁶ or as applied to their own cases.²⁷ Some DWI defendants, finding limited success with these strategies,²⁸ have attempted to fight their cases—often charged under per se statutes—by attacking the accuracy of the breathalyzer itself. This approach has frequently proven difficult, however, due to a presumption of reliability afforded breathalyzers in some states.²⁹ As information about the inner workings of the machines has been

21. DOUGLAS V. HAZELTON, MINNESOTA DWI HANDBOOK § 16:6, at 202–03 (Thompson West 2009–10) (citing tests in which subjects with no blood alcohol content have blown up to 0.18, more than twice the legal limit, results caused entirely from mouth alcohol).

22. *Id.* § 16:16, at 209–10 (“A change of 1 degree C in the temperature of expired breath will change the breath alcohol concentration and hence the apparent blood: breath ratio by 6.5%.”); Workman, *supra* note 14, at 222 (“[F]or each increase in body temperature of one degree centigrade, breath alcohol results are inflated by 7.5%.”).

23. Charles Short, Note, *Guilt by Machine: The Problem of Source Code Discovery in Florida DUI Prosecutions*, 61 FLA. L. REV. 177, 178 (2009).

24. HAZELTON, *supra* note 21 § 16:14, at 208 (stating that, in Minnesota, it is not required to prove Intoxilyzer results within a margin of error).

25. *E.g.*, MINN. STAT. § 169A.24 (Supp. 2009) (promulgating a felony DWI charge with a maximum sentence of seven years); LA. REV. STAT. ANN. § 14:98 (2004) (promulgating a maximum DWI sentence of thirty years).

26. Polin, *supra* note 9, at 16672.

27. *Id.* at 172–74.

28. *Id.* at 170–72, 173–74.

29. *E.g.*, HAZELTON, *supra* note 21 § 16:2, at 197–99 (“If the Intoxilyzer test is administered by a certified operator who testifies that the instrument is in proper working order, the chemicals are in proper working order, the chemicals are in proper condition, and the room air results are within acceptable limits, this constitutes a prima facie case of reliability.”).

kept secret by their manufacturers³⁰ and some states have foreclosed the possibility of normal discovery of additional information about the machines,³¹ many defendants have been forced to accept the law's circular logic: "the machine is reliable because it produces results; the results are right because the machine is reliable."³²

C. BREAKING THE CODE: MINNESOTA DEFENDANTS' QUEST FOR BREATH TESTER SOURCE CODE

Recently, defendants seeking a new avenue for attacking the evidence against them have taken to moving for the discovery of source code underlying the machine's software.³³ In the past, this had met with mixed results.³⁴ Lately, however, defendants have found some success.

The Minnesota Supreme Court's recent line of *Underdahl*³⁵ rulings has promulgated the rights for and limitations on the ability of DWI defendants and implied consent petitioners³⁶ to obtain the source code for Minnesota's breathalyzer machines. In *Underdahl I*, the Minnesota Supreme Court considered whether state trial courts had the jurisdiction to order the State to disclose the source code for Minnesota's breathalyzer equipment and whether such code was discoverable.³⁷ After a

30. *E.g.*, Workman, *supra* note 14, at 228 ("Manufacturers often claim that the source code is a trade secret, and cannot be disclosed.").

31. *See, e.g.*, FLA. STAT. § 316.1932(4) (2008).

32. Short, *supra* note 23, at 178.

33. LAWRENCE LESSIG, CODE VERSION 2.0 369 n.16 (2006) ("Source code is the code that programmers write A program is (ordinarily) written in source code, but to be run it must be converted into a language the computer can process." It is converted to "object code", machine-readable language written in strings of 0s and 1s, by a program called a "compiler.").

34. *See, e.g.*, Short, *supra* note 23, at 185–89.

35. *In re Com'r of Pub. Safety (Underdahl I)*, 735 N.W.2d 706 (Minn. 2007); *State v. Underdahl (Underdahl II)*, 749 N.W.2d 117, 121 (Minn. Ct. App. 2008); *State v. Underdahl (Underdahl III)*, 767 N.W.2d 677, 685–87 (Minn. 2009).

36. MINN. STAT. § 169A.52 (Supp. 2010) (establishing that in Minnesota, certain circumstances, including an Intoxilyzer test reading over 0.08, can trigger a driver's license revocation under provisions of the "implied consent" law); *e.g.*, HAZELTON, *supra* note 21 § 2:19–24, at 22–24 (explaining that such revocations are subject to both administrative and judicial review, the latter being in the form of a contested civil hearing). MINN. STAT. § 169A.53 (Supp. 2010) (establishing that in such hearings, the individual is the petitioner, and the Minnesota Commissioner of Public Safety is the respondent).

37. *Underdahl I*, 735 N.W.2d 706.

trial court granted implied consent petitioner (and DWI defendant) Dale Underdahl's discovery motion for disclosure of the equipment's source code, the Commissioner of Public Safety petitioned the Court of Appeals for a writ of prohibition.³⁸ According to *Underdahl I*, The Commissioner argued that a Minnesota statute presuming the reliability of a breath test³⁹

divest[ed] the district court of jurisdiction to order the additional discovery. In the alternative, the commissioner argued that if the court had jurisdiction, it abused its discretion by ordering discovery of source code that the commissioner claimed was not in its possession, custody, or control and was, therefore, nondiscoverable. The commissioner also argued that due process did not require discovery of the source code because the code was proprietary to CMI and thus unavailable to the state.⁴⁰

The Minnesota Court of Appeals denied the petition.⁴¹ On appeal, the Supreme Court found that the Commissioner had met none of the elements justifying a writ of prohibition: (1) that the district court is about to exceed its jurisdiction, (2) that the order at issue relates to an outcome-determinative matter, (3) that the information in question is "clearly not discoverable and for which there is no adequate remedy at law,"⁴² and (4) that the issue "relates to a rule of practice affecting all litigants."⁴³ In finding against the second element, the Minnesota Supreme Court, though refusing to decide copyright issues raised by the parties, did not disturb the findings of the district court and court of appeals that the contract between Minnesota and CMI gave Minnesota ownership of the machine's source code.⁴⁴ The court also found "that the commissioner's ability to enforce its contract with CMI constitutes an adequate legal remedy."⁴⁵

The Minnesota Supreme Court's later opinion in *Underdahl III*⁴⁶ clarified the *Underdahl I* ruling and, subsequently, the *Underdahl* line of cases has been called the

38. *Id.* at 708.

39. See MINN. STAT. § 634.16 (Supp. 2010).

40. *Underdahl I*, 735 N.W.2d at 709.

41. *Id.* at 709–10.

42. *Id.* at 711 (citing *Thermorama, Inc. v. Shiller*, 135 N.W.2d 43, 46 (Minn. 1965)).

43. *Id.* at 713 (citing *Thermorama*, 135 N.W.2d at 46).

44. *Id.* at 712–13.

45. *Underdahl I*, 735 N.W.2d 706, 713 (Minn. 2007).

46. *State of Minnesota v. Underdahl (Underdahl III)*, 767 N.W.2d 677, 685–87 (Minn. 2009).

“friendliest” in the country for allowing defendants access to breathalyzer source codes.⁴⁷ *Underdahl III* is the culmination of numerous attempts since 2006 by DWI defendants to obtain the source code of the CMI-manufactured Intoxilyzer 5000EN,⁴⁸ the model of breathalyzer used in Minnesota.⁴⁹ Two defendants, Dale Underdahl and Timothy Brunner, were arrested in Dakota County, Minnesota in 2006 and 2007, respectively.⁵⁰ Underdahl was charged with one count of misdemeanor fourth-degree and one count of gross misdemeanor third-degree DWI. Brunner was charged with one count of felony first-degree DWI.⁵¹ Underdahl’s third-degree charge was based entirely on an Intoxilyzer test, while Brunner’s charge was based partly on an Intoxilyzer reading.⁵² Both brought motions to discover the Intoxilyzer source code, and the respective trial courts granted the motions.⁵³ The State of Minnesota subsequently appealed the rulings of both trial courts and the court of appeals combined and reversed both cases, on the basis that Underdahl and Brunner had made “inadequate showings in the district court on the relevancy of the source code.”⁵⁴

In reversing, the Minnesota Court of Appeals relied on a discovery rule allowing a trial court to require disclosure where “the information may relate to the guilt or innocence of the defendant or negate the guilt or reduce the culpability of the defendant as to the offense charged.”⁵⁵ Though Underdahl made little attempt at a threshold showing of relevance, Brunner made a significant effort.⁵⁶ Still, the court of appeals found that

respondents have not shown what an Intoxilyzer “source code” is, how it bears on the operation of the Intoxilyzer, or what precise role it has in regulating the accuracy of the machine. Accordingly, there is no showing as to what possible deficiencies could be found in a source code, how significant any deficiencies might be to the accuracy of the

47. Short, *supra* note 23, at 187.

48. Complaint ¶21, *Minnesota v. CMI of Kentucky, Inc.*, Civ. No. 08–603, 2008 WL 2276445, at *9 (D. Minn. March 3, 2008).

49. HAZELTON, *supra* note 21 § 16:3, at 199–201.

50. *Underdahl III*, 767 N.W.2d at 680–81.

51. *Id.*

52. *Id.*

53. *Id.*

54. *Underdahl II*, 749 N.W.2d 117, 121 (Minn. Ct. App. 2008).

55. *Id.* at 120 (citing MINN. R. CRIM. P. 9.01, subd. 2(3)).

56. *Underdahl III*, 767 N.W.2d 677, 685 (Minn. 2009).

machine's results, or that testing of the machine, which defendants are permitted to do, would not reveal potential inaccuracies without access to the source code.⁵⁷

With that finding, the Minnesota Supreme Court ruled that the trial courts' decision to order "discover[y of] the Intoxilyzer source code was an abuse of discretion."⁵⁸

On appeal, the Minnesota Supreme Court first addressed procedural issues before moving on to decide the showing required to support a source code motion, an issue of first impression in Minnesota.⁵⁹ Without so much as a cursory explanation, the court adopted the level of showing required "in cases where the defendant has requested to review confidential information,"⁶⁰ citing cases involving crime victim medical records. The standard the court chose was to require "some plausible showing that the information sought would be both material and favorable to [the] defense."⁶¹ On that matter, the court reversed as to Brunner's case but affirmed as to Underdahl's. The supreme court said that "Underdahl made no threshold evidentiary showing whatsoever,"⁶² and held that "even under a lenient showing requirement, Underdahl failed to make a showing that the source code may relate to his guilt or innocence."⁶³ Brunner, however, had

submitted a memorandum and nine exhibits to support his request for the source code. The memorandum gave various definitions of "source code." The first exhibit was the written testimony of David Wagner, a computer science professor at the University of California in Berkeley, which explained the source code in voting machines, the source code's importance in finding defects and problems in those machines, and the issues surrounding the source code's disclosure. The next exhibits detailed Brunner's attempts to obtain the source code, both from the State and CMI. The last exhibit was a copy of a report prepared on behalf of the defendants in New Jersey litigation about the reliability of New Jersey's breath-test machine.⁶⁴

As to Brunner's case, the court found that the "submissions show that an analysis of the source code may reveal deficiencies

57. *Underdahl II*, 749 N.W.2d at 122.

58. *Id.* at 123.

59. *Underdahl III*, 767 N.W.2d at 681–84.

60. *Id.* at 684.

61. *Id.* at 684–85 (citing *State v. Hummel*, 483 N.W.2d 68, 72 (Minn. 1992)).

62. *Id.* at 685.

63. *Id.* at 686.

64. *Id.* at 685.

that could challenge the reliability of the Intoxilyzer and, in turn, would relate to Brunner's guilt or innocence."⁶⁵

Finally, the court faced the question of whether Minnesota was in possession of the Intoxilyzer's source code. In finding that it was, the court cited its ruling in *Underdahl I* along with the language of the request for proposal (RFP) for the Intoxilyzer, which included a provision "stat[ing] that any copyrightable material would 'be the property of the State and are by this Contract assigned to the State.'"⁶⁶ Justices Alan Page and Paul Anderson dissented as the decision concerned *Underdahl*, with Page writing that the majority put a burden on defendants greater than that which the rule⁶⁷ required.⁶⁸

After the *Underdahl I* ruling, the way appeared clear for defendants' successful demands for the source code of the Intoxilyzer. Minnesota, however, was not in actual possession of the code and, thus, could not turn it over to defendants and petitioners.⁶⁹ Between the ruling in *Underdahl I* and the rulings in *Underdahl II* and *III*, the State of Minnesota filed suit against CMI in federal court seeking, among other things, a declaration that the State was the owner of the copyrights in question, an order requiring production of the code, and money damages.⁷⁰ After a first attempt at settlement through a consent judgment was rejected by the court due in part to concerns over "meaningful access" to and delivery of the source code,⁷¹ a second attempt was approved. The resulting order lays out the access that Minnesota litigants have to the Intoxilyzer source code.⁷²

The order requires CMI to provide access to the source code in several forms. First, and perhaps most important, it allows "Authorized Minnesota litigants, their counsel, or experts"

65. *Underdahl III*, 767 N.W.2d 677, 685 (Minn. 2007).

66. *Id.* at 686 n.6 (quoting *Underdahl I*, 735 N.W.2d 706, 708 (Minn. 2007)).

67. MINN. R. CRIM. P. 9.01, subd. 2(3).

68. *Underdahl III*, 767 N.W.2d at 688 (Page, J., concurring in part and dissenting in part) ("I conclude that the source code relates to *Underdahl*'s guilt or innocence and that, under Rule 9.01, subd. 2(3), its disclosure is required.").

69. Complaint, *supra* note 48, at *2.

70. *Id.* at *17-*18.

71. Minnesota v. CMI of Kentucky, Inc. (*CMI*), Civ. No. 08-603, 2009 WL 2163616, at *7-*8 (D. Minn. July 16, 2009).

72. *Id.* at *1-*3.

access to the source code, the Intoxilyzer itself, and related equipment and tools at CMI's headquarters in Kentucky.⁷³ Access to the code is to be without cost, but the reviewer is prohibited from copying the code verbatim "except as necessary for meaningful expert review," as well as from retaining any portion of the source code upon leaving the facility in any case.⁷⁴ The order requires that other steps be taken by reviewers to protect the secrecy of the code, including that any filing of the code with a court be done under seal.⁷⁵ Finally, the on-site review portion of the order requires CMI to "cooperate, assist, and take reasonably necessary measures to ensure a meaningful review of the Source Code and to protect the integrity of all aspects of the Source Code review."⁷⁶ Next, the order requires CMI to "make the Source Code available to Authorized Minnesota litigants in Minnesota in a printed, hardbound book format . . ."⁷⁷ The book is to include the entire source code, save the portions dealing with the Intoxilyzer's security features, is not to leave Minnesota, and CMI may charge up to \$250 for a copy (\$125 for "publicly funded defenses").⁷⁸ The order also allows for further good-faith negotiation where the access provided for in the order is insufficient, as well as allowing for further intervention by the court if necessary.⁷⁹ The order leaves exclusive ownership of the source code with CMI, except for the portions developed for the Minnesota model of the Intoxilyzer.⁸⁰ Finally, "authorized Minnesota litigant" is defined⁸¹ and the permitted uses of the code are delineated.⁸²

73. *Id.* at *3.

74. *Id.* at *4.

75. *Id.*

76. *CMI*, Civ. No. 08-603, 2009 WL 2163616, at *4 (D. Minn. July 16, 2009).

77. *Id.*

78. *Id.* at *4-*5

79. *Id.* at *5.

80. *Id.*

81. *Id.* (explaining the basic requirements are that the litigant must be a party to a DWI or implied consent case, a judge must have ordered the production of the source code and found it relevant, the judge have issued a protective order protecting the code, and anyone having access to the code have executed a non-disclosure agreement).

82. *CMI*, Civ. No. 08-603, 2009 WL 2163616, at *6 (D. Minn. July 16, 2009) (setting forth the sole purpose is for prosecuting or defending DWI and implied consent cases. Experts and attorneys are authorized to share reports

The impact of the settlement is still being felt. A “Source Code Coalition” of criminal defense attorneys has formed “to share the costs and the benefits of computer software and infrared breath-alcohol machine experts and their findings.”⁸³ The Minnesota Department of Public Safety has also prepared to retain an expert should problems with the source code be found.⁸⁴ Due in part to the prospect of source code challenges to breath test results, blood and urine test submissions in Minnesota, DWI cases have doubled, resulting in significant laboratory backlogs.⁸⁵

III. TEST FAILURE: THE DEFENDANT’S NEED FOR SOURCE CODE ACCESS AND CURRENT LAW’S SHORTCOMINGS

This Section will explain the need for defendants to have robust access to breathalyzer testing, including source code access, to satisfy the demands of the Confrontation Clause. It goes on to describe how the *Underdahl* line of cases fall short in providing such access.

A. THE SILENT WITNESS: WHY JUSTICE REQUIRES DEFENDANTS TO HAVE ACCESS TO THE SOURCE CODE

In prosecutions for DWI under *prima facie* statutes, a breathalyzer reading is only one piece of evidence which a prosecution may introduce against a defendant, albeit an important one. By contrast, under *per se* statutes, a breathalyzer test result is nearly enough alone to convict a defendant.”⁸⁶ In few other situations is a single piece of evidence so vital to a case’s success or failure. Given the essential nature of breathalyzer evidence in a case charged under a *per se* statute, the due process concerns regarding source code access cannot be overstated, particularly when

and offer testimony on behalf of different clients and prospective clients, but the reports and testimony are limited to Minnesota courts.).

83. Minnesota Society for Criminal Justice, MSCJ Source Code Coalition Membership Page, <http://www.mscj.org/sourcecodecoalition.html> (last visited March 1, 2010).

84. Minnesota Bureau of Criminal Apprehension, Intoxilyzer 5000EN Court Challenge Frequently Asked Questions 2, *available at* <http://www.bca.state.mn.us/Intoxilyzer5000ENFAQs.pdf>.

85. *Id.*

86. *See supra* text accompanying notes 10–13.

coupled with the already significant concerns about the reliability and accuracy of breathalyzer evidence.⁸⁷

The Confrontation Clause of the United States Constitution establishes the right to confront witnesses in a criminal prosecution.⁸⁸ This is a “bedrock procedural guarantee”⁸⁹ and “to deprive an accused of the right to cross-examine the witnesses against him is a denial of the Fourteenth Amendment’s guarantee of due process of law.”⁹⁰ Certainly, in almost any DWI prosecution, there are witnesses available for the prosecution and defense to call. The citing or arresting peace officer, for example, is almost sure to be called by one of the sides. The person administering a breath test, if not the same officer, is also very likely to be called as a witness.⁹¹ Even in a prosecution under a per se statute, these witnesses are important for the prosecution’s attempt to meet its burden of proof and the defense’s attempt to raise reasonable doubt. However, the report produced by the breath testing equipment itself effectively acts as another witness. If the parties are left without access to the machine’s source code, the tester is effectively a “black box” whose accuracy and reliability cannot be evaluated on the basis of a thorough analysis of the tester’s operation.

United States Supreme Court Confrontation Clause jurisprudence has held that testimonial evidence may be admitted through a third party, but the Court claims to have “remained faithful to the Framers’ understanding [of the Sixth Amendment]: Testimonial statements of witnesses absent from trial have been admitted only where the declarant is unavailable, and only where the defendant has had a prior

87. See *supra* text accompanying notes 14–25.

88. U.S. CONST. amend. VI. (“In all criminal prosecutions, the accused shall enjoy the right to . . . be confronted with the witnesses against him . . .”).

89. *Crawford v. Washington*, 541 U.S. 36, 42 (2004) (citing *Pointer v. Texas*, 380 U.S. 400, 406 (1965)).

90. *Pointer*, 380 U.S. at 405.

91. While not experts, “[t]he BCA trains all Intoxilyzer 5000 operators at a 36-hour training course involving classroom teaching followed by a hands-on training with volunteer drinkers. Certification course handbooks are available from the BCA. <http://www.bca.state.mn.us/Lab/Documents/breath.html>.” HAZELTON, *supra* note 21 § 16:2, at 197–99. The Intoxilyzer test must be conducted “by a certified operator who testifies” to proper working order and conditions to constitute “a prima facie case of reliability.” *Id.*

opportunity to cross-examine.”⁹² Later, the Court held that statements “are testimonial when the circumstances objectively indicate that there is no . . . ongoing emergency, and that the primary purpose of the interrogation is to establish or prove past events potentially relevant to later criminal prosecution.”⁹³ A breathalyzer test administered after an arrest on suspicion of drunk driving is for the exclusive purpose of providing a basis for prosecution.⁹⁴ Furthermore, while the arrestee usually has the right to refuse the test,⁹⁵ additional criminal penalties may apply for the refusal.⁹⁶ The operator of a breathalyzer machine may be able to testify to the machine’s calibration and proper use, but such an operator is extremely unlikely to qualify as an expert or to know the details of the machine’s design or programming.⁹⁷ As such, operator testimony seems insufficient to satisfy Confrontation Clause demands. The breathalyzer report, then, is effectively an admissible testimonial statement despite the unavailability of the machine’s source code and the defendant’s inability to have analyzed the code.

Others have considered the issue of whether source code is testimonial under *Crawford v. Washington*,⁹⁸ in which the United States Supreme Court held that the Confrontation Clause “bars ‘admission of testimonial statements of a witness who did not appear at trial unless he was unavailable to testify, and the defendant had had a prior opportunity for cross-examination.’”⁹⁹ Charles Short cites the “powerfully persuasive” effect of breathalyzer results on a jury, concluding that the use of such testing “implicates the same concerns that arise in Confrontation Clause cases.”¹⁰⁰ Courts, too, have occasionally discussed the Confrontation Clause implications of restricting challenges to the reliability of breathalyzer results.¹⁰¹ Notably,

92. *Crawford*, 541 U.S. at 59.

93. *Davis v. Washington*, 547 U.S. 813, 822 (2006).

94. Short, *supra* note 23, at 197.

95. *But cf.* MINN. STAT. § 169A.52(1) (Supp. 2010) (stating that peace officers in Minnesota may obtain a test where probable cause exists to believe an arrestee has committed criminal vehicular homicide or injury, despite the arrestee’s refusal).

96. *E.g.*, MINN. STAT. § 169A.20(2) (Supp. 2010).

97. HAZELTON, *supra* note 21 § 16:2, at 197–99.

98. *Crawford v. Washington*, 541 U.S. 36, 42 (2004).

99. *Davis v. Washington*, 547 U.S. 813, 821 (2006).

100. Short, *supra* note 23, at 197.

101. *State v. Chun*, 943 A.2d 114, 163–70 (N.J. 2008) (explaining that the

however, such discussion is absent in the *Underdahl* cases. Other courts have sidestepped the issue.¹⁰² There has been no ruling that has found a clear Confrontation Clause problem in the use of breath test results without the underlying source code. However, much of this authority predates the United States Supreme Court's decision in *Melendez-Diaz v. Massachusetts*,¹⁰³ in which the Court "held that a state forensic analyst's lab report that is prepared for use in a criminal prosecution is subject to the demands of the Sixth Amendment's Confrontation Clause."¹⁰⁴ While the report at issue in *Melendez-Diaz* was a drug analysis,¹⁰⁵ there are obvious similarities between such an analysis and a breathalyzer report. Both purport to be scientifically accurate analyses of chemical compounds, both are prepared for use in a criminal prosecution, and both are crucial pieces of evidence in such litigation. If a breathalyzer report is found to be sufficiently analogous to the report in *Melendez-Diaz*, that precedent may serve to require the breathalyzer source code—analogueous to the analyst authoring the laboratory report—to be accessible to the defendant.

Given that no court has yet found the Confrontation Clause directly implicated by the absence of breathalyzer source code despite the number of appellate rulings regarding the issue of litigant access to such code, it seems that DWI defendants face an uphill battle in convincing courts to find a Confrontation Clause violation. However, it remains "unjust to convict a defendant largely on the breath test result issued by a machine whose technical details are undiscoverable."¹⁰⁶ Defendants who are denied access to breathalyzer source code or whose access is excessively limited should continue to bring challenges under

New Jersey Supreme Court has found that having the operator of a breath testing machine available to testify is sufficient to satisfy Confrontation Clause issues, further finding no constitutional problems with the admissibility of breath tester foundational documents and results); Short, *supra* note 23, at 198–99 (citing several Florida cases).

102. Commonwealth v. House, No. 2008-SC-000114-DG, 2009 WL 2705919, at *3 (Ky. Aug. 27, 2009).

103. *Melendez-Diaz v. Massachusetts*, 129 S. Ct. 2527 (2009).

104. Oyez Project, *Melendez-Diaz v. Massachusetts*, U.S. Supreme Court Case Summary & Oral Argument, http://www.oyez.org/cases/2000-2009/2008/2008_07_591/ (last visited May 3, 2010).

105. *Id.*

106. Short, *supra* note 23, at 196.

the Confrontation Clause, particularly in the wake of *Melendez-Diaz*, and courts should rule that defendants' Sixth Amendment rights are violated when they are deprived of the chance for a meaningful review of a breathalyzer and its underlying source code.

B. *UNDERDAHL*'S UNDERPERFORMANCE: AN INADEQUATE PRECEDENT

The *Underdahl* line of cases, despite setting a Minnesota Supreme Court-level precedent called "the friendliest [in the country] in response to attempts by the defense to obtain discovery of breath testing machine source code,"¹⁰⁷ did not go far enough in ensuring defendants the right to contest the reliability of their Intoxilyzer test results. In perhaps an even worse result, *Underdahl III*'s failure to delineate between the acceptable and unacceptable levels of threshold showing required to obtain access to the source code leaves enormous discretion to trial judges over whether to grant disclosure requests on an issue that seems to cry out for uniform treatment.

Underdahl I was decided on the narrow procedural ground of the denial of a petition for a writ of prohibition.¹⁰⁸ While the *Underdahl I* court did make important rulings, the scope of the opinion was not lost on lower courts.¹⁰⁹ The first of two main holdings from *Underdahl I* was that Minnesota trial courts had jurisdiction to hear challenges to the Intoxilyzer's validity.¹¹⁰ The second was that the court could not "conclude that the district court ordered the production of [the Intoxilyzer source code] that is clearly not discoverable."¹¹¹ The first holding, while merely jurisdictional on its face, made clear that district courts were not bound to meekly accept the prima facie reliability of the Intoxilyzer as sacrosanct. The second holding,

107. *Id.* at 187.

108. That the Supreme Court affirmed the ruling of the Court of Appeals in *Underdahl I* is perhaps not surprising given that "[a] writ of prohibition is an extraordinary remedy and is only used in extraordinary cases." *Underdahl I*, 735 N.W.2d 706, 710 (Minn. 2007) (citing *Thermorama, Inc. v. Shiller*, 135 N.W.2d 43, 46 (Minn. 1965)).

109. Had the scope of the ruling been more broad, it would have likely preemptively settled *Underdahl II*. 749 N.W.2d 117 (Minn. Ct. App. 2008).

110. *Underdahl I*, 735 N.W.2d at 711.

111. *Id.* at 713.

while it allowed for the *possibility* that Intoxilyzer source code was discoverable, remained a far cry from saying that the code *was discoverable*. The court left unanswered questions about the ownership and copyright of the source code, whether the code was affirmatively discoverable (as opposed to “not undiscoverable”), and who could access it. These issues were finally resolved by *Underdahl III*.

Underdahl III highlighted the deficiencies with the *Underdahl I* ruling, creating some of its own as well. The first major error the *Underdahl III* court made was in the standard it selected for a showing required to win a discovery order. The court admitted that it had “not previously stated what showing is required to support a district court’s conclusion that information may relate to a defendant’s guilt or innocence in a DWI case.”¹¹² In attempting to rectify that failure, however, the court compounded the problem by adopting an unjustified and inappropriate standard. As noted by the concurrence and dissent, the standard¹¹³ the *Underdahl III* court chose is higher than the applicable Minnesota Rule of Criminal Procedure.¹¹⁴ Worse, the court provided no reasoning in adopting such a heightened required showing standard. In fact, the standard the court adopted was promulgated in cases dealing with the discovery of medical records for victims of violent crimes.¹¹⁵ While a confidentiality interest arguably exists in the Intoxilyzer source code—namely, CMI’s trade secret assertion¹¹⁶—the court made no mention of this. Even had the court named the confidentiality interest implicated, it would have had to find that the interest in question was significant enough to demand a balance with the defendants’ liberty interest. Presumably, this would not have been easy for the court; “[i]n contrast to the important liberty interests of a DUI defendant, the interests of the breath testing machine’s

112. *Underdahl III*, 767 N.W.2d 677, 684 (Minn. 2009).

113. *See supra* text accompanying notes 60–61.

114. *See supra* text accompanying note 55.

115. *E.g.*, *State v. Hummel*, 483 N.W.2d 68, 72 (Minn. 1992) (overturning the district court’s discovery order of a confidential file because the defense offered no theories on how the file “could be related to the defense or why the file was reasonably likely to contain information related to the case”).

116. This interest only remains plausible due to the court’s prior unwillingness to decide the copyright issue which both sides briefed in *Underdahl I*. The court concluded “that we cannot decide the copyright issues raised.” *Underdahl I*, 735 N.W.2d 706, 712 (Minn. 2007).

manufacturer are relatively light.”¹¹⁷ Further, and again as pointed out by the concurrence and dissent, the court’s choice of a heightened showing standard caused an absurd result to be reached.¹¹⁸ The court’s ruling in *Underdahl I* entitled Underdahl to the source code in his civil implied consent proceeding, but not in his criminal DWI case.¹¹⁹ Justice Page, concurring and dissenting, found it “anomalous that Underdahl is entitled to have access to the source code when his right to drive is at stake, but he is denied access to that same source code when his right to liberty is threatened.”¹²⁰

A second major problem with *Underdahl III* is that it failed to provide adequate guidance to lower courts regarding the regarding the sufficiency of a showing of need. In *Underdahl III*, the Minnesota Supreme Court rejected Underdahl’s de minimis showing while accepting as adequate the rather robust showing made by Brunner.¹²¹ The court provided no additional clues as to the minimum level of showing required to meet the standard it adopted. The majority may have expected lower courts to turn to case law based on the *Hummel* precedent for guidance.¹²² That line of jurisprudence, however, is based on an entirely different set of factual circumstances and interests from those in *Underdahl*. The court mentions several times the “broad discretion . . . given to district courts in discovery matters,”¹²³ but despite this and despite reviewing under an “abuse of discretion” standard, the court was willing to overturn the district court as to Underdahl’s case. The court also apparently does not consider the difficulty for defendants, without having any access to the Intoxilyzer or source code, to make a satisfactory showing that information about the Intoxilyzer could be material to their case.

The incomplete and inadequate nature of the ruling in *Underdahl I* and the confusing, unexplained adoption of a

117. Short, *supra* note 23, at 193 (noting further, “[a] criminal defendant seeking source code discovery does not raise the same alarm as a business competitor seeking equivalent discovery.”).

118. *Underdahl III*, 767 N.W.2d 677, 688 (Minn. 2009) (Page, J., concurring in part and dissenting in part).

119. *Id.*

120. *Id.*

121. *Id.* at 685–86.

122. *See supra* note 115.

123. *Underdahl III*, 767 N.W.2d at 685.

required showing standard higher than that in the Minnesota Rules of Criminal Procedure and failure to provide further guidance under that standard as it relates to DWI cases in *Underdahl III* make the *Underdahl* line of jurisprudence a regrettable mistake. The Minnesota Supreme Court should adopt the reasoning suggested by Justice Page's concurrence and dissent in *Underdahl III*.¹²⁴ The current state of law is unjustly limiting to defendants' discovery and does not conform to the Minnesota Rules of Criminal Procedure.

C. SETTLING FOR LESS: THE SHORTCOMINGS IN MINNESOTA'S FEDERAL SETTLEMENT WITH CMI

Once it became clear after *Underdahl I* that Minnesota would need to come into actual possession of the Intoxilyzer source code to continue prosecuting DWIs and implied consent proceedings, the State filed suit against CMI. Despite apparently strong legal claims, Minnesota eventually agreed to settle its claims against CMI due to "the cost, risk, uncertainty, and delay of further protracted and expensive litigation"¹²⁵ The settlement that the federal district court approved was actually the second attempt at resolving the case, the first agreement having been rejected by the court as providing inadequate access to litigants.¹²⁶ Even the final CMI settlement, however, granted insufficient access to the source code for defendants in terms of cost and expert analysis. This result may have been a troubling example of the conflict of interest created by allowing states—prosecuting entities—to effectively settle for the rights of individual litigants.

1. The Inadequate Settlement

The final Minnesota-CMI settlement is insufficient in several respects. First, it imposes unreasonable costs on DWI defendants and implied consent petitioners. While the direct costs for access to the source code allowed for in the settlement are relatively low, the indirect costs can be very large. To access a Minnesota-model Intoxilyzer and to inspect the source code of the machine in its native electronic form, the settlement

124. *Id.* at 687–88.

125. *CMI*, Civ. No. 08–603, 2009 WL 2163616, at *1 (D. Minn. July 16, 2009).

126. *Id.* at *7.

requires that a litigant, her attorney, or (most practically) her expert to travel to Kentucky, where CMI is headquartered.¹²⁷ The costs for travel and lodging for even a brief trip are likely to be quite high. When added to the cost for retaining an expert or in lost wages, the expenses are likely to be prohibitive for all but the wealthiest and most devoted litigants. A coalition of Minnesota defense attorneys, including appointed public defenders, has formed to share the costs of such an endeavor.¹²⁸ Still, this joint-venture is far from an ideal solution. The costs involved in a source code challenge effectively limit all but the wealthiest and most devoted litigants to hiring those attorneys who are members of the coalition. The price tag associated with sending an expert to CMI, and/or the inconvenience of going oneself, all but prevents litigants from having any sort of individualized testing performed with or on the Intoxilyzer.

Second, the Minnesota-CMI settlement does not allow for sufficiently broad expert analysis. The trade secret protection aspects of the settlement effectively prevent meaningful copying of the source code for later analysis.¹²⁹ This further drives up costs by requiring a reviewer of the source code to physically remain at CMI's facility during the review. It also restricts the tools available to the reviewer to whatever CMI provides or he can bring with him to the facility.

Finally, the Minnesota-CMI settlement awards ownership of the source code, presumably including copyright, to CMI, except for those portions developed under the Request For Proposal for the Minnesota model of the Intoxilyzer. While the State of Minnesota likely has little interest in ownership of the Intoxilyzer programming itself, allowing CMI continued ownership of the full source code allows the company to limit access to that required by the settlement terms, sharply restricting litigants' use of the code. Given that the State's suit included a claim for ownership of the full source code,¹³⁰ allowing CMI to be assigned the intellectual property rights should have, at the very least, allowed the State to extract

127. CMI, Inc., About CMI, <http://www.alcoholtest.com/cmiinfo.htm> (last visited March 26, 2010).

128. Minnesota Society for Criminal Justice, MSCJ Source Code Coalition Membership Page, <http://www.msccj.org/sourcecodecoalition.html> (last visited March 1, 2010).

129. See *supra* text accompanying notes 72–82.

130. See *supra* text accompanying note 70.

favorable terms from CMI elsewhere in the settlement.

The issues of cost, copying, and ownership were settled with terms highly unfavorable to Minnesota litigants. Given the apparent strength of Minnesota's legal claims and CMI's presumed disinterest in the cost, uncertainty, and potentially crippling negative outcome of litigation, Minnesota should have insisted on terms more favorable to it and its citizens. In particular, Minnesota should have extracted a settlement allowing for an Intoxilyzer testing model, the related tools and accessories, the Intoxilyzer source code in electronic form, and the relevant testing tools to be located in Minnesota for easier access resulting in lower-cost analysis. The State could have done this by using the claim for ownership of the Intoxilyzer source code, an apparently valuable asset to CMI, as a bargaining chip.

2. The Inherent Conflict of Interest

The settlement reached between Minnesota and CMI may have been so unfavorable to litigants seeking the code because of an inherent conflict of interest on the part of the State of Minnesota.¹³¹ In Minnesota, the State is the ultimate prosecuting authority, though it is represented by respective city and county attorney's offices. The state's interest, politically and financially, is in quick and inexpensive convictions for criminal charges, including DWI, and in uncontested license revocations. Source code requests, of course, have the potential to result in acquittals, and at the very least are likely to extend and complicate criminal cases.

In Minnesota's suit against CMI, Minnesota's Commissioner of Public Safety was the State's representative and named plaintiff.¹³² The Office of the Commissioner oversees a number of agencies, including Minnesota Driver and Vehicle Services and the Bureau of Criminal Apprehension (BCA),¹³³ which oversees the state's Intoxilyzer program.¹³⁴ The BCA maintains even now that "the Intoxilyzer is reliable" and "that access to the source code is unnecessary to the process of determining the accuracy and reliability of the Intoxilyzer

131. The federal lawsuit's captioned plaintiff was "State of MINNESOTA, by Michael Campion, its Commissioner of Public Safety." *CMI*, Civ. No. 08-603, 2009 WL 2163616 (D. Minn. July 16, 2009).

132. *Id.*

133. Minn. Dep't of Pub. Safety, Organizational Chart, *available at* http://www.dps.state.mn.us/OrgChart/DPS_Org_Chart_October_2009.pdf.

134. Minnesota Bureau of Criminal Apprehension, *supra* note 84, at 2.

5000EN.”¹³⁵ Attorneys for the State of Minnesota, including those representing the Commissioner, also opposed defendant access to Intoxilyzer source code throughout the *Underdahl* cases, arguing at times that the State did not have the code,¹³⁶ that “the code was proprietary to CMI and thus unavailable to the state,”¹³⁷ and that “due process does not require disclosure of the source code.”¹³⁸

In suing for the source code, the Commissioner was required to argue the very opposite position in federal court as he had been advocating for in state court. In addition, he was forced to argue for an outcome which might end up proving detrimental to the State of Minnesota’s interest. This obvious potential conflict of interest may have had no effect on the eventual settlement. However, it seems at least reasonable to consider the possibility that the Commissioner was less-than-zealously advocating for the interests of DWI defendants and implied consent petitioners, especially given the fact that drunk drivers are a politically unpopular group. This possibility seems especially plausible when considering that the settlement that eventually was reached was the second attempt, the first, even less state-favorable attempt having been rejected by the court, apparently for not providing enough access to litigants.¹³⁹ Even if the Commissioner’s potential conflict of interest played no improper part in the outcome of the case, the mere appearance of impropriety can be enough to undermine confidence in his office and the settlement.

During the course of source code litigation, the State of Minnesota opposed source code access for defendants and petitioners in Minnesota courts before being forced to sue for such access in federal court. Given that the eventual settlement with CMI appears not particularly favorable for defendants and petitioners, the State’s conflict of interest is troubling. In the future, states facing similar situations should provide for attorneys independent of the prosecuting authority to ensure that the interests of all parties are represented. Alternatively, courts being asked to approve settlements should scrutinize the balance of the agreements closely, and should not hesitate to reject them if they are inadequately protective of

135. *Id.* at 1.

136. *Underdahl III*, 767 N.W.2d 677, 686–87 (Minn. 2009).

137. *Underdahl I*, 735 N.W.2d 706, 709 (Minn. 2007).

138. *Underdahl II*, 749 N.W.2d 117, 119 (Minn. Ct. App. 2008).

139. *See supra* text accompanying note 71.

2010]

DWI SOURCE CODE MOTIONS

875

defendants' rights.

IV. CONCLUSION AND PROPOSED SOLUTION

The issue of source code access for Minnesota DWI defendants is relatively new and continues to develop as an area of law. Until this point, however, the access granted to litigants seeking breath tester source code has not been adequate to protect the rights of criminal defendants and civil implied consent petitioners. Neither the state courts' rulings on the discoverability of source code nor the federal settlement with CMI properly weigh the balance of the manufacturers' interest in the intellectual property it purports to own with individuals' liberty interest (in criminal cases) and drivers license interest (in civil proceedings).

Remedies for this inadequate protection of litigants' rights can come either legislatively or judicially. A legislative solution would be two-fold: creating a statutory scheme guaranteeing defendants and petitioners access to source code and requiring the State to return to federal court to attempt to re-litigate the settlement with CMI on the ground that the settlement does not provide meaningful access for litigants. A judicial scheme, on the other hand, could involve overturning *Underdahl III* to the extent that it requires a showing beyond that required by the Minnesota Rules of Criminal Procedure. A court in the Minnesota judicial system could also find that litigants require more access to the Intoxilyzer and its source code than the federal settlement provides for.¹⁴⁰

Regardless of how the issues regarding Intoxilyzer source code are ultimately resolved, it is clear that the current system of breath testing in Minnesota is troubled. Research showing the shortcomings of the Intoxilyzer is widespread and incontrovertible, and given the serious liberty interests involved, such error cannot continue to be tolerated.

140. "The Court . . . notes that its order does not infringe on the Minnesota state courts' authority to conduct subsequent litigation and does not mandate that a state court follow the process set forth in this order." *CMI*, Civ. No. 08-603, 2009 WL 2163616, at *9 (D. Minn. July 16, 2009).